



TLM-50/500-QCW Quasi-CW Thulium Fiber Laser

NEW PRODUCT





Applications

- ► Open and Endoscopic Surgery in Urology
- ► General Surgery
- Lithotripsy and Percutaneous Urinary Lithotripsy



Features

- ▶ Wavelength 1940 nm
- ▶ Pulse Energy up to 5 J
- ▶ Peak Power 500 W
- ▶ Pulse Duration 0.2-10 ms

IPG Photonics' has expanded its quasi-continuous wave (QCW) fiber laser series to longer wavelengths. IPG's TLM-50/500-QCW Thulium quasi-cw fiber laser provides up to 5 J per 10 millisecond pulse at 1.94 microns. These compact energy efficient and reliable lasers are designed for integration into medical devices for surgical procedures using open, laparoscopic and endoscopic inclusion, excision, resection, ablation, vaporization, coagulation and hemostasis of soft tissue in urology, urinary lithotripsy and general surgery.



TLM-50/500-QCW Quasi-CW Thulium Fiber Laser

Optical Characteristics Wavelength*, nm 1940; typ. 1880 min., 2100 max. Emission Bandwidth FWHM, nm <10 Mode of Operation Pulsed/CW Pulse Repetition Rate, Hz Single Pulse -100 Max. Average Power, W 50 Max. Peak Power, W 500 Max. Pulse Energy, J 5 @ 10 ms Pulse Duration, ms 0.2 - 10Power Tunability, % 10-100 Power Stability**, % ±2.5 Output Fiber Core Diameter, µm 100 0.22 Fiber NA

^{**} Over 1 hour

General Characteristics	
Pilot Beam Wavelength, nm	532
Pilot Beam Power, mW	<5
Dimensions $(W \times D \times H)^{***}$, mm	336 × 435 × 148
Weight, kg	<25
Cooling	Air-cooled
Supply Voltage, VDC	48
Power Consumption	500

^{***} TLR-50/500-QCW Rack-mounted units are available upon request. Please contact IPG for more details.

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MAX. AVERAGE OUTPUT POWER: 100 W MAX. PEAK OUTPUT POWER: 1000 W PUSE DURATION: 102-210 ms PULSE REPETITION RATE: 0-100 Hz WAVELENGTH RANGE: 1800-2200 nm DANGER - INVISIBLE LASER
RADIATION AVOID EYE OR SKIN
EXPOSURE TO DIRECT OR
SCATTERED RADIATION
CLASS 4 LASER PRODUCT

^{*} Other wavelengths in the specified range are available upon request. Please contact IPG for more details.